

*MESACTURUS DICRURUS*, NEW SPECIES, AN  
UNUSUAL STOMATOPOD FROM MICRONESIA  
(STOMATOPODA: GONODACTYLIDAE)

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*Abstract.*—*Mesacturus dicrurus*, the third species in the genus, is described. The new species is distinguished from other species in the genus by having an apically bifurcate median projection of the telson that is about as long as the base of the telson and that is covered with relatively long setae. The apical bifurcation is V-shaped.

Manning (1969), in a discussion of the *Gonodactylus*-like stomatopods in the Gonodactylidae, presented a diagnosis and discussion of the genus *Mesacturus* and a key to species then included in the genus. He noted that there were two general types of telson morphology in the genus, in one the telson is similar to that of *Gonodactylus*, whereas in the other the telson is characterized by a median bifurcate process. Later, Manning (1978) erected a new genus, *Mesacturoides*, to include the species of *Mesacturus* having *Gonodactylus*-like telsons. Two species, *Mesacturus furcicaudatus* (Miers, 1880) and *M. kempfi* (Odhner, 1923), remained in *Mesacturus*.

Among crustaceans collected from consolidated coralline algae at the seaward margin of an erosion bench at Guam, Mariana Islands, we found specimens of *Mesacturus* not referable to either known species. Further examination of stomatopods collected at Saipan, Mariana Islands, by the senior author revealed specimens of the new species. We examined stomatopods in the collection of the National Museum of Natural History, Smithsonian Institution (USNM) that were collected from Yap, Caroline Islands, and had been identified as *M. kempfi* and found them to be referable to the new species.

Primary types have been deposited in the USNM, Bernice P. Bishop Museum, Ho-

nolulu (BPBM), and the Natural History Museum of Los Angeles County, Los Angeles (LACM), as indicated in the material examined.

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Family Gonodactylidae Giesbrecht, 1910  
*Mesacturus dicrurus*, new species  
Figs. 1, 2

*Material.*—Holotype: Mariana Islands: Guam; Pago Bay, Taogam Point [13°25'N, 144°48'E]; from consolidated coralline algae at seaward edge of erosion bench; 7 June 1986; 1 male (USNM).

Paratypes: Mariana Islands: Guam; same locality and habitat as holotype; 3 Sep 1984; 3 females (USNM, LACM). Saipan; sand + coral; 25 Dec 1945; Coll. A. H. Banner; 1 male, 1 female (USNM). Saipan; SSW side of island; in coral heads; 1945; Coll. A. H. Banner; 2 males (USNM). Saipan; Wing Beach, near Matuis [15°16'N, 145°48'E]; from reef rock bearing coralline algae collected just shoreward of reef margin; 0.5 m; 21 Nov 1980; 3 females (BPBM).

Caroline Islands: Yap; Ifalik (formerly Ifaluk) Atoll; south end of Falarik Islet

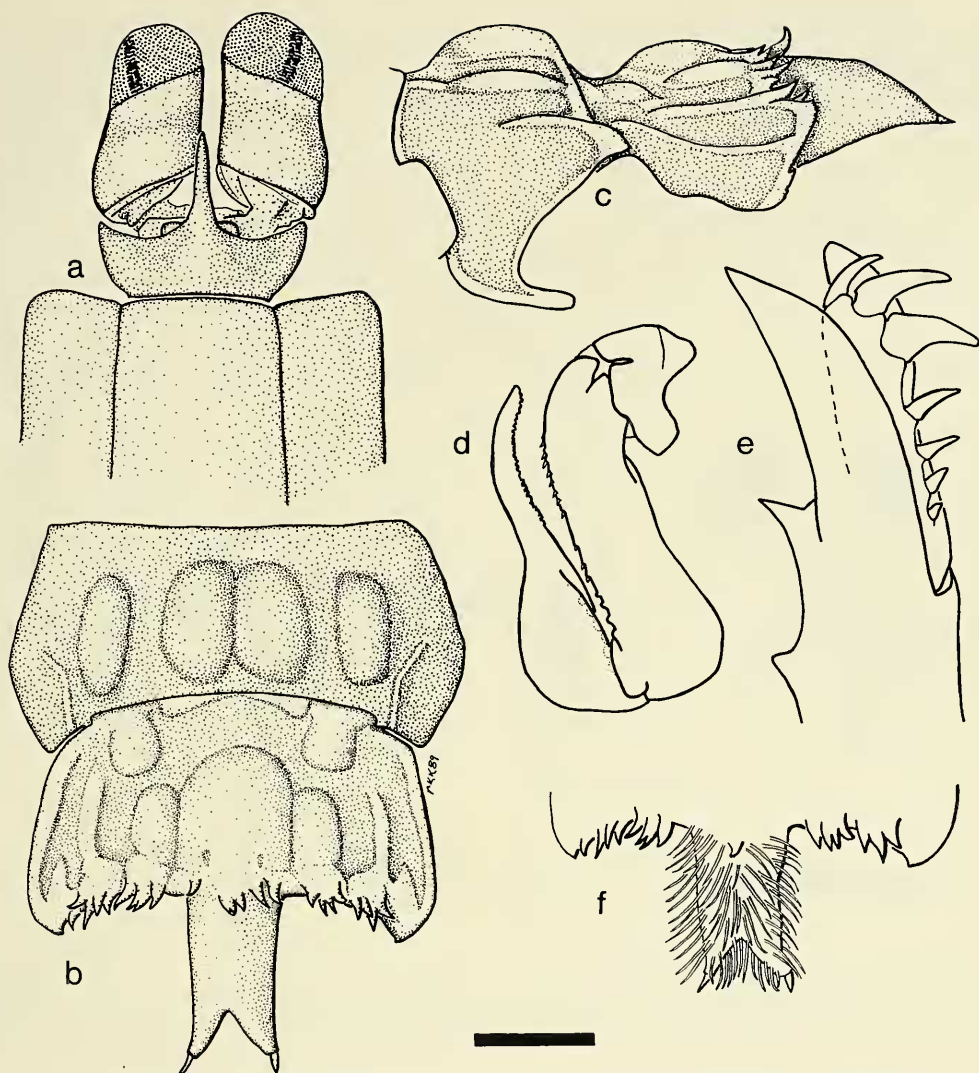


Fig. 1. *Mesacturus dicrurus*, male holotype: a, Anterior part of body; b, Sixth abdominal somite, telson (dorsal view); c, Same (lateral view); d, Left claw; e, Left uropod (ventral view); f, Median projection of telson, showing setae. Scale: 1 mm.

[07°15'N, 144°27'E]; Sta. 13-C-3, 14-B-1, 19-D, 20-C, 706; 25 Aug 1953; Coll. D. P. Abbott and Bates, 4th Pacific Atoll Survey Team, Pacific Science Board; 5 males, 2 females, 1 juvenile (USNM 104692, 104694-7). Ifalik Atoll; north end of Falarik; Sta. 359, 372, 638; 21, 22 Sep, 17 Oct 1953; Coll. F. M. Bayer; 3 males, 2 females (USNM 104689-91).

*Description of holotype.*—Eystalks cylin-

drical, slightly inflated proximally, length about twice width. Ocular scale small, blunt, erect.

Anterior margin of rostral plate concave, anterolateral angles bluntly rounded or acute, but not spiniform, width of plate greater than median length, anterior spine twice as long as basal part of plate.

Dactylus of raptorial claw serrated on distal half of inner margin. Opposable margin

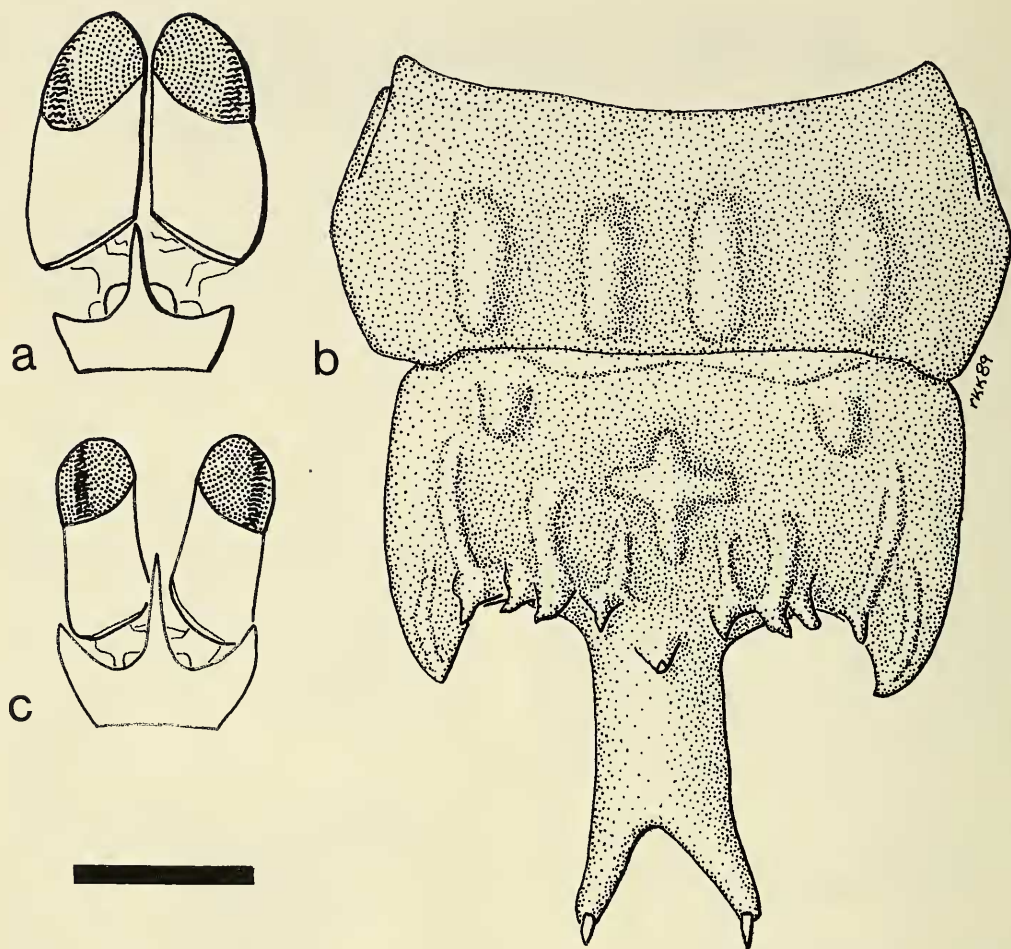


Fig. 2. *Mesacturus dicrurus*, juvenile paratype, total length 12.9 mm: a, Eyes, rostral plate; b, Sixth abdominal somite, telson (dorsal view). Female paratype, total length 33.3 mm (USNM 104692): c, Eyes, rostral plate. Scale: a = 1 mm, b = 0.5 mm, c = 2 mm.

of propodus with 10 articulated teeth along midlength, with 4 rounded bosses proximally fitting into corresponding sockets on dactylus.

Anterior 5 abdominal somites smooth. Dorsal surface of sixth abdominal somite with 4 swollen, unarmed carinae, submedian carinae confluent medially.

Telson slightly wider than long, posterior medial projection half total length of telson, narrowing slightly distally, with V-shaped fork at  $\frac{2}{3}$  projection length, surface covered with very stout simple setae. Dorsal surface

of telson with 3 broadly inflated carinae, median largest. Posterior margin with 4 clusters of 4–5 dorsally curved teeth, base of median projection with 5 irregularly placed teeth.

Base of uropod with single lobe or spine distally near inner margin, outer margin of proximal segment of exopod with 7 spines, distal 3 recurved.

*Variations.*—Some of the paratypes differed slightly from the holotype. Variation was noticed in the shape of the rostral plate. In some specimens from Falarik the ante-

rior margin of the plate was very concave and the anterolateral angles of the plate more sharply pointed than in specimens from the Marianas (compare Fig. 2c to Fig. 1a). The number of teeth on the margin of the propodus of the raptorial claw ranged from 6 to 13. Size-related variation in the development of carinae on the sixth abdominal segment and the telson, spination of the posterior margin of the telson, and the degree of setal development on the median projection of the telson was noticeable. In larger individuals the carinae were much more swollen than in small individuals (compare Fig. 1b to Fig. 2b). In large individuals the posterior margin of the telson had 4 clusters of 4–5 teeth, but in small individuals the posterior margin had 6 individual teeth. Small individuals had fewer setae on the median projection of the telson than large specimens. The number of teeth on the outer margin of the proximal segment of the uropod varied from 7 to 8. The larger number resulted from the presence of an additional very small tooth proximally.

*Measurements.*—Total length of males 11.4 to 33.2 mm, of females 10.7 to 33.3 mm. Measurements of holotype: total length 22.4 mm; carapace length 4.6 mm; eyestalk length 1.9 mm; cornea length 0.9 mm; rostral plate length 1.2 mm, width 1.6 mm; sixth abdominal somite width 3.6 mm; telson length (excluding median projection) 1.6 mm, width 3.6 mm; median projection of telson length 1.4 mm.

*Color.*—Body brown fading to tan at base of telson, median process of telson olive-green. Antennae, walking leg, maxillipeds, pleopods, and uropods pale olive-green. Meral spot clear with black spot anteriorly.

*Habitat.*—Guam specimens were collected from consolidated coralline algae at seaward edge of erosion bench. Saipan specimens were collected from coralline-encrusted reef rock just shoreward of fringing

reef margin or from coral heads. Yap specimens from Station 706 (USNM 104692) were collected from inside coral heads on the outer slope of the reef platform. The bathymetric range of the new species is from the intertidal zone to 0.5 m.

*Remarks.*—The telson of *Mesacturus furcicaudatus* (Miers, 1880) differs from that of the new species and *M. kempi* (Odhner, 1923) by having a deeply bifurcate median projection; the median projection is shallowly bifurcate in the latter two species. The new species differs from *M. kempi* in the relative lengths of the base of the telson and the median projection. In *M. dicrurus* the median projection is about as long as the base of the telson, whereas in *M. kempi* the median projection is about twice the length of the base. Also, the median projection is covered by relatively long setae in the new species, but in *M. kempi* the projection is covered by relatively short setae. The bifurcation of the median projection of the telson is broadly concave in *M. kempi*, but V-shaped in the new species.

*Etymology.*—From the Greek *dikros*, meaning forked, in combination with *oura*, meaning tail, in reference to the forked median projection of the telson.

*Distribution.*—*Mesacturus dicrurus* is known only from Yap, Guam, and Saipan.

#### Literature Cited

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